United States Department of Agriculture | Forest Service | Northeastern Area State & Private Forestry | 180 Canfield Street Morgantown, WV 26505-3101

File Code: 3410 (NA-06-01)
Date: November 3, 2005

Subject: 2005 Hemlock Woolly Adelgid Survey Results

To: Kathleen Morse, Forest Supervisor
Allegheny National Forest

During late May through early September of this year, Mike Williams, Tom Hebda and Angela Yuska of the Allegheny National Forest conducted a survey of 104 hemlock stands throughout the Allegheny National Forest. We are glad to report that no hemlock woolly adelgid was found in any of the stands sampled. The accompanying map and table provides general information and the locations of the sampled stands.

The hemlock woolly adelgid*, Adelges tsugae* (HWA), was introduced into the Eastern United States from Asia in the early 1950s near Richmond, Virginia. The adelgid was present on some exotic tree species that a private collector planted in his arboretum. The distribution of the HWA remained localized for the next decade. Since the 1960s the population has spread throughout the Northeastern United States. In 2003, HWA was reported in Clinton and Centre Counties approximately 40 miles from the Allegheny National Forest. The impact of HWA on the host species, eastern hemlock (*Tsuga canadensis*), is severe. Significant tree mortality usually occurs within 4 to 7 years after infestation. This insect pest not only threatens the hemlock resource but also the unique ecosystem it helps to comprise.

This sampling plan was created using Allegheny National Forest stand data. Only stands defined as "hemlock" were selected and a subset of those stands with road or trail access was surveyed.

The purpose of this survey was:

- To detect if HWA was present on the Allegheny National Forest.
- To provide a minimum detection threshold whereby HWA can be detected with 75 percent reliability in hemlock stands where at least 2 percent of the trees are infested.
- To make an efficient determination of the percentage of trees infested within a stand at the 0.25 precision level.

Even though HWA has not yet been found on the forest, it is important that field-going personnel continue to monitor for evidence of HWA in their areas and report this information to the Morgantown Field Office. As part of our continuing monitoring efforts, we plan to revisit a subset of this year's sites that have the highest likelihood of becoming infested. These areas will include campgrounds, trailheads, and other highly visited areas.

I personally would also like to extend my appreciation to Kevin, Mike, and Angela for their valuable assistance in this survey. If you or any of your staff have any questions or comments regarding this survey, please contact Richard Turcotte at (304) 285-1544.

Sincerely,

JOHN W. HAZEL
Field Representative
Morgantown Field Office

Cc: District Ranger, Bradford RD
District Ranger, Marienville/Ridgeway RD
Bob White, Forest Silviculturist

RMT/AKS

Table 1. Allegheny National Forest hemlock stand survey information, May to September 2005.

STAND	COMPARTMENT	DISTRICT	ACCESS	HWA*	SURVEYED		LOCATION
					2004	2005	
1	669	Marienville	Yes	None Found	Yes	Yes	SR302
1	857	Marienville	Yes	None Found	.	Yes	SR948
1	610	Marienville	Yes	None Found	Yes	Yes	SR66
2	605	Marienville	Yes	None Found	Yes	Yes	SR3004
4	811	Marienville	Yes	None Found	.	Yes	Snowmobile Connecter 17
5	703	Marienville	Yes	None Found	.	Yes	SR66
7	851	Marienville	Yes	None Found	.	Yes	Highland
8	849	Marienville	Yes	None Found	Yes	Yes	Hiking
14	810	Marienville	Yes	None Found	.	Yes	Snowmobile Connecter 17
14	848	Marienville	Yes	None Found	.	Yes	Oil well
14	879	Marienville	Yes	None Found	Yes	Yes	Red Lick Run
15	610	Marienville	Yes	None Found	Yes	Yes	SR66
15	697	Marienville	Yes	None Found	Yes	Yes	Snowmobile Connecter 14
17	652	Marienville	Yes	None Found	Yes	Yes	Snowmobile Connecter 9
20	832	Marienville	Yes	None Found	Yes	Yes	Twin Lakes Hiking
20	685	Marienville	Yes	None Found	Yes	Yes	Mville
22	846	Marienville	Yes	None Found	Yes	Yes	SR66
22	686	Marienville	Yes	None Found	Yes	Yes	Mville
22	686	Marienville	Yes	None Found	Yes	Yes	Mville
23	832	Marienville	Yes	None Found	Yes	Yes	Twin Lakes Hiking
24	686	Marienville	Yes	None Found	Yes	Yes	Mville
24	870	Marienville	Yes	None Found	.	Yes	Big Run
25	846	Marienville	Yes	None Found	.	Yes	SR66
26	686	Marienville	Yes	None Found	Yes	Yes	Mville
27	824	Marienville	Yes	None Found	Yes	Yes	N Country
32	845	Marienville	Yes	None Found	Yes	Yes	SR66
33	681	Marienville	Yes	None Found	.	Yes	Kelly Pines
33	681	Marienville	Yes	None Found	Yes	Yes	Kelly Pines
34	889	Marienville	Yes	None Found	Yes	Yes	Red Lick Run
36	889	Marienville	Yes	None Found	Yes	Yes	Red Lick Run
37	644	Marienville	Yes	None Found	Yes	Yes	Snowmobile Connecter 7
42	820	Marienville	Yes	None Found	Yes	Yes	SR8
45	907	Marienville	Yes	None Found	.	Yes	ESP307
48	907	Marienville	Yes	None Found	Yes	Yes	ESP307
49	701	Marienville	Yes	None Found	.	Yes	Rappe Run
51	820	Marienville	Yes	None Found	Yes	Yes	SR8
53	674	Marienville	Yes	None Found	.	Yes	Oil Wells
56	703	Marienville	Yes	None Found	.	Yes	SR66
59	909	Marienville	Yes	None Found	Yes	Yes	Laurel Hill
61	649	Marienville	Yes	None Found	.	Yes	Snowmobile Connecter 12
65	805	Marienville	Yes	None Found	.	Yes	Twin Lakes
69	908	Marienville	Yes	None Found	Yes	Yes	ESP307
85	906	Marienville	Yes	None Found	Yes	Yes	ESP309
87	848	Marienville	Yes	None Found	.	Yes	Oil well
87	700	Marienville	Yes	None Found	.	Yes	Rappe Run
88	700	Marienville	Yes	None Found	.	Yes	Rappe Run

90	906	Marienville	Yes	None Found	.	Yes	ESP309
1	222	Bradford	Yes	None Found	Yes	Yes	Sill (RT 337 Pleasant Twp)
1	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
1	334	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
1	350	Bradford	Yes	None Found	Yes	Yes	SR66
2	444	Bradford	Yes	None Found	.	Yes	SR321
2	476	Bradford	Yes	None Found	.	Yes	SR321
2	278	Bradford	Yes	None Found	Yes	Yes	Ram's Horn
2	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
2	353	Bradford	Yes	None Found	Yes	Yes	N Country Scenic
3	445	Bradford	Yes	None Found	Yes	Yes	SR321
3	206	Bradford	Yes	None Found	Yes	Yes	Rocky Gap
3	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
7	349	Bradford	Yes	None Found	Yes	Yes	SR66
8	431	Bradford	Yes	None Found	Yes	Yes	North Branch
8	349	Bradford	Yes	None Found	.	Yes	SR66
8	431	Bradford	Yes	None Found	Yes	Yes	North Branch
11	290	Bradford	Yes	None Found	Yes	Yes	N Country Scenic
11	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
11	353	Bradford	Yes	None Found	Yes	Yes	N Country Scenic
12	444	Bradford	Yes	None Found	Yes	Yes	SR321
12	283	Bradford	Yes	None Found	.	Yes	Island
12	353	Bradford	Yes	None Found	Yes	Yes	N Country Scenic
13	223	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
13	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
14	462	Bradford	Yes	None Found	.	Yes	SR59
14	328	Bradford	Yes	None Found	.	Yes	Access Point
14	302	Bradford	Yes	None Found	Yes	Yes	Henry Mills
18	224	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
18	278	Bradford	Yes	None Found	Yes	Yes	Hearts Content
19	310	Bradford	Yes	None Found	Yes	Yes	Cherry Run
21	426	Bradford	Yes	None Found	Yes	Yes	Allegheny Snowmobile Loop
21	478	Bradford	Yes	None Found	Yes	Yes	All snow loop
23	440	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
23	301	Bradford	Yes	None Found	Yes	Yes	Barnes
25	256	Bradford	Yes	None Found	Yes	Yes	Snowmobile Loop
26	461	Bradford	Yes	None Found	Yes	Yes	Thundershower
27	302	Bradford	Yes	None Found	Yes	Yes	Henry Mills
30	354	Bradford	Yes	None Found	Yes	Yes	N Country Scenic
31	490	Bradford	Yes	None Found	Yes	Yes	Lake
32	310	Bradford	Yes	None Found	Yes	Yes	Cherry Run
33	205	Bradford	Yes	None Found	Yes	Yes	Rocky Gap
36	229	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
38	438	Bradford	Yes	None Found	Yes	Yes	Buck Lick Run
38	437	Bradford	Yes	None Found	.	Yes	SR321
39	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
40	444	Bradford	Yes	None Found	Yes	Yes	SR321
40	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
43	209	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
44	209	Bradford	Yes	None Found	Yes	Yes	All Snow Loop

44	231	Bradford	Yes	None Found	Yes	Yes	SR206
45	440	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
46	209	Bradford	Yes	None Found	Yes	Yes	All Snow Loop
47	230	Bradford	Yes	None Found	Yes	Yes	SR206
51	476	Bradford	Yes	None Found	Yes	Yes	SR321
52	327	Bradford	Yes	None Found	Yes	Yes	Hickory Creek
63	455	Bradford	Yes	None Found	Yes	Yes	Oil Well
63	454	Bradford	Yes	None Found	Yes	Yes	SR321

*HWA: Hemlock Woolly Adelgid